UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.usplo.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

22908 7590 11/05/2009 BANNER & WITCOFF, LTD. TEN SOUTH WACKER DRIVE

SUITE 3000 CHICAGO, IL 60606 EXAMINER

LAWRENCE JR, FRANK M

ART UNIT PAPER NUMBER

1797 DATE MAILED: 11/05/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,734	02/15/2007	Peter Hawes	011382,00003	1844

 ${\tt TITLE~OF~INVENTION:~METHOD~FOR~SULFUR~COMPOUNDS~REMOVAL~FROM~CONTAMINATED~GAS~AND~LIQUID~STREAMS}\\$

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/05/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth tions.	ng the Patent, advance of nerwise in Block 1, by (rders and notification of r a) specifying a new corres	naintenance fees v pondence address:	vill be and/o	mailed to the current r (b) indicating a sepa	correspondence address as arate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				rs. Each additiona	l paper	r, such as an assignme	or domestic mailings of the for any other accompanying int or formal drawing, must	
22908	7590 11/05	/2009	have			iling or transmission.		
TEN SOUTH W SUITE 3000	VITCOFF, LTD. VACKER DRIVE		I he Stat addi tran	Cer reby certify that the es Postal Service vessed to the Mail smitted to the USP	tificat is Fee(vith su l Stop TO (57	e of Mailing or Trans s) Transmittal is being fficient postage for fire ISSUE FEE address T) 273-2885, on the d	mission g deposited with the United st class mail in an envelope above, or being facsimile late indicated below.	
CHICAGO, IL 6	00606						(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTC	RNEY DOCKET NO.	CONFIRMATION NO.	
10/559,734	02/15/2007		Peter Hawes	011382.000		011382.00003	1844	
TITLE OF INVENTION	: METHOD FOR SULF	UR COMPOUNDS REM	IOVAL FROM CONTAM	NATED GAS AN	DLIQ	UID STREAMS		
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0		\$1810	02/05/2010	
EXAM	IINER	ART UNIT	CLASS-SUBCLASS					
LAWRENCE .	JR, FRANK M	1797	095-148000					
Change of corresponder CFR 1.363).	ence address or indicatio	n of "Fee Address" (37	2. For printing on the p					
	ondence address (or Cha B/122) attached.	nge of Correspondence	(I) the names of up to or agents OR, alternation	3 registered pater ely,	it attor	neys 1		
PTO/SB/47; Rev 03-0 Number is required.	ication (or "Fee Address')2 or more recent) attach	ed. Use of a Customer	2 registered patent atto listed, no name will be	meys or agents. It	по пап	ne is 3		
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or tyr	ne)				
PLEASE NOTE: Unl	less an assignee is ident	ified below, no assignee	data will appear on the p	stent. If an assign	ee is i	dentified below, the d	ocument has been filed for	
(A) NAME OF ASSI		netion of this form is NO	(B) RESIDENCE: (CITY					
(-)			(4)			,		
			_	_			_	
Please check the appropr	iate assignee category or	categories (will not be po	rinted on the patent):	Individual G	orporat	ion or other private gro	oup entity 🗖 Government	
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (Plea	se first reapply a	ny pre	viously paid issue fee	shown above)	
Issue Fee			A check is enclosed.					
			Payment by credit car The Director is hereby	authorized to char	ge the	required fee(s), any de	ficiency, or credit any	
			overpayment, to Depó	sit Account Numb	er	(enclose a	n extra copy of this form).	
5. Change in Entity Sta	tus (from status indicated s SMALL ENTITY statu		☐ b. Applicant is no lon	sor claiming SMA	II EN	TITV status See 37 C	FR 1 27(a)(2)	
							ne assignee or other party in	
interest as shown by the	records of the United Sta	tes Patent and Trademark	Office.					
Authorized Signature				Date				
Typed or printed nam	e			Registration N	lo			
		FR 1.311. The informati	on is required to obtain or r	-		lic which is to file (and	by the USPTO to process)	
an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this but Virginia 22313-1450. DO 313-1450.	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th O NOT SEND FEES OR	1.14. This collection is est depending upon the indivi- e Chief Information Office COMPLETED FORMS TO	imated to take 12 i idual case. Any co r, U.S. Patent and D THIS ADDRESS	minute ommen Trader S. SEN	s to complete, includir ts on the amount of ti nark Office, U.S. Dep D TO: Commissioner	d by the USPTO to process) ig gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

OMB 0651-0033



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandra, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/559,734	02/15/2007	Peter Hawes	011382.00003	1844	
22908 7	590 11/05/2009		EXAM	UNER	
BANNER & WITCOFF, LTD.			LAWRENCE:	LAWRENCE JR, FRANK M	
TEN SOUTH WACKER DRIVE			ART UNIT	PAPER NUMBER	
SUITE 3000 CHICAGO, IL 60606			1797 DATE MAII ED: 11/05/200	9	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 353 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 353 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
10/559,734	HAWES ET AL.
Examiner	Art Unit
Frank M. Lawrence	1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable. PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to the amendment filed September 4, 2009.
- The allowed claim(s) is/are 1-21,23-26 and 28-34.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) \square All b) ☐ Some* c) ☐ None of the:
 - 1. T Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No.
 - 3.
 ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
- Paper No./Mail Date
- 4. T Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7.

 Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other

Application/Control Number: 10/559,734 Page 2

Art Unit: 1797

DETAILED ACTION

Allowable Subject Matter

Claims 1-21, 23-26 and 28-34 are allowed.

2. The following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose or suggest a motivation for using a 13X or LSX zeolite for the production methods or uses recited in the claims. The closest prior art discloses phosphorous treatment of Y type zeolites. All outstanding rejections and objections are overcome and are withdrawn. The examiner accepts the terms "rayon," "nylon," and "sisal" as non-trademark, art accepted materials.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Marcheschi can be reached on 571-272-1374. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/559,734 Page 3

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Frank M. Lawrence/ Primary Examiner, Art Unit 1797